Streptococcus pneumoniae, Invasive Disease

reporting code = 04823 (Drug Resistant)
= 04830 (Susceptible)
case report form: (CDC, 6/99)
Streptococcus pneumoniae Surveillance Worksheet
MERLIN ELECTRONIC SUBMISSION

Clinical description

Streptococcus pneumoniae causes many clinical syndromes, depending on the site of infection (e.g., acute otitis media, pneumonia, bacteremia, or meningitis).

Laboratory criteria for diagnosis

- Isolation of *S. pneumoniae* from a normally sterile site (e.g., blood, cerebrospinal fluid, or, less commonly, joint, pleural, or pericardial fluid)

AND for resistant isolates:

- Intermediate- or high-level resistance of the *S. pneumoniae* isolate to at least one antimicrobial agent currently approved for use in treating pneumococcal infection (12, 13)*

Case classification

Confirmed: a clinically compatible case that is laboratory confirmed

Comment

Report both resistant and non-resistant isolates. Extended data in Merlin is only required to be completed for those cases <5 years old.

*Resistance defined by Clinical and Laboratory Standards Institute (CLSI) [formerly National Committee for Clinical Laboratory Standards (NCCLS)] approved methods and CLSI-approved interpretive minimum inhibitory concentration (MIC) standards (µg/mL) *for S. pneumoniae*. CLSI recommends that all invasive *S. pneumoniae* isolates found to be "possibly resistant" to beta-lactams (i.e., an oxacillin zone size of <20 mm) by oxacillin screening should undergo further susceptibility testing by using a quantitative MIC method acceptable for penicillin, extended-spectrum cephalosporins, and other drugs as clinically indicated.

References

12. National Committee for Clinical Laboratory Standards. Performance standards for antimicrobial susceptibility testing. Villanova, PA: National Committee for Clinical Laboratory Standards, 1994;14(16); NCCLS document M100-S5.
13. CDC. Defining the public health impact of drug-resistant Streptococcus pneumoniae: report of a working group. MMWR 1996;45(No. RR-1).